Forest Sector Workgroup — draft recommendation (10-10-08) Forest Management

Permanence/Enforceability

Duration. To be creditable as offsets, forest management projects must be of sufficiently long duration to ensure permanence of carbon storage (at least 100 years).

Obligation in the event of reversal. In the event that a project is no longer reliable or is reversed, as described below under "project reliability," the offset seller is required to secure the purchase of substitute allowances or offsets. The offset seller is also required to provide up-front financial assurances such as insurance, bonding, etc.

In the event that the offset provider fails to meet this obligation, the state will secure a substitute allowance or offset and assess the offset seller the cost of the purchase while securing a lien on the property for the value of the allowance or offset and any assessed civil liabilities.

Basis for offset payments. Carbon dioxide emission offsets (achieved through sequestration and storage or through emissions avoided) will be registered based on modeling of the expected amounts of carbon stored at periodic intervals. Actual payments will be based on end-of-period self-monitoring by entities of actual implementation of modeled management prescriptions, with state or third party spot checking and penalties for false reporting.

Ten-year true-up. At 10 year intervals, sellers must perform re-inventory of forest and wood-product carbon, at which point sellers may adjust their prescriptions based on new information, may receive additional credits for carbon stored in excess of modeled amounts, or must pay back credits received, based on amounts of modeled carbon storage that were not achieved. The state or third party would have appropriate auditing authority to verify inventory results.

State protocols. The State will promulgate regulations establishing standardized sampling protocols for determining carbon inventories at project outset and for periodic true-ups.

Types of reversibility. Forest management projects eligible for offset credits must provide assurances against reversibility of the commitments in the management plan that forms the basis for offset credit during the 100+ year project period. Two types of reversibility must be addressed:

- 1. <u>Project reliability</u> Relates to events attributable to the actions and omissions of the offset seller. This category would include the seller's inability to fulfill the commitments of the management plan or violations of the terms of a management plan.
- Natural Reversibility Relates to events attributable to the actions of third parties or natural causes including unanticipated changes in forest growth rates and natural disasters

Remedies. For these two types of reversibility, there are two distinct sets of remedies.

1. Project reliability concerns must be addressed by the following:

- Contractual Remedies. A legal instrument of sufficient durability and enforceability, between the offset provider and the state, regional, or national market institution, that allows enforcement of offset project commitments, as well as marketing beyond the state or regional boundaries. The legal instrument should include contractual terms defining the minimum time period that the sequestered and stored carbon (or avoided emissions) as a result of the project will be maintained and not reversed (100+ years). In addition, the contract should define the management actions that the seller is relying on to sequester and store the estimated amount of carbon.
- State Regulation. A system of State regulation, consistent with or delegated from a regional or national market institution, if one exists, that allows the State to approve and enforce the terms of forest management plans that are relied on as the basis for offset credits. The system should include submission of proposed management prescriptions and forest carbon modeling results based on those prescriptions to a State agency or accredited third party, State or third party approval of management prescriptions and model results including verification of estimates of additional carbon stored, and crediting, monitoring, and reporting as described above. The State should have authority to enforce management actions, and payback provisions through State civil and criminal penalties.
- <u>Financial Assurance.</u> To qualify for offset credit, the offset seller must provide to the State regulator financial assurance that secures performance of offset commitments. This assurance must be of sufficient size to ensure performance of management actions approved by the State or accredited third party or secure the purchase of substitute allowances or offsets in the event that performance is economically impossible or is undesirable to the landowner. Acceptable financial assurance can include a demonstration that the entity in question will be financial capable of meeting the commitments, insurance, bonding, etc. Assurance(s) must be renewed every five years or upon a material change in the seller's financial circumstances or management actions. The state may promulgate rules for financial assurance mechanisms.

2. Natural reversibility concerns must be addressed by at least one of the following:

- <u>Insurance</u>. The offset seller must provide some form of insurance against failures to achieve estimated carbon storage. This could come in the form of an agreement with a third party provider to purchase allowances or replacement offsets from other sources in the event the project does not meet performance expectations or when offsets are prematurely reversed.
- <u>State reserve pool.</u> Alternatively, the State could establish a reserve pool system in which a percentage of the reportable offsets from approved projects are not credited but are held by the State in reserve as a replacement pool for registered offsets that become reversed by natural disturbance or cessation of project activities that achieved the offsets.